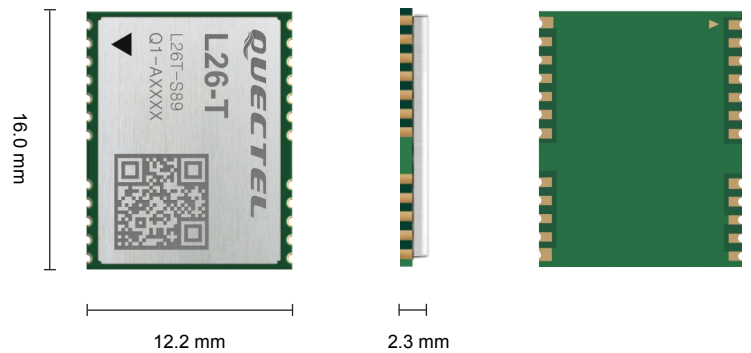


Quectel L26-T

Ultra-Compact GNSS Timing Module



The L26-T GNSS module features high precision timing in demanding applications world-wide. The module can concurrently connect to GPS, Galileo, GLONASS, BeiDou and QZSS constellations, and use DGPS and SBAS systems for better accuracy and performance. The L26-T module also supports the outputting of multi-GNSS raw data. The module is designed and manufactured according to IATF 16949: 2016 standard.

Multi-constellation guarantees accurate navigation even in harsh environments such as urban canyons. The built-in LNA ensures better performance under weak signal circumstances, as well as the position hold mode that reduces timing jitter. Through the position hold mode, the synchronization can be maintained with just one satellite in view.

The L26-T module utilizes AGNSS aiding data that significantly reduces the time to first fix (TTFF). The AGNSS function also offers outstanding acquisition sensitivity even on first setup, when precise location, time or frequency are still unknown.

For battery-powered applications, the L26-T module uses the power saving mode to reduce the power consumption.

The super performance of L26-T makes it ideal for base station, automotive, or industrial applications.



Key Features

- ✓ Ultra-compact size: 16.0 mm × 12.2 mm × 2.3 mm
- ✓ Multi-GNSS engine for GPS, GLONASS, BeiDou, Galileo and QZSS
- ✓ AGNSS function
- ✓ Built-in LNA for better sensitivity
- ✓ Timing function
- ✓ Multi-GNSS raw data
- ✓ Support for DGPS (RTCM standard)/SBAS (WAAS/EGNOS/MSAS/GAGAN)



Multi-GNSS Systems



Low Power Consumption



Ultra-Compact Size



Tracking Sensitivity:
-162 dBm



Operation Temperature:
-40 °C to +85 °C



RoHS Compliant

Quectel L26-T

Ultra-Compact GNSS Timing Module

Model for Global

GNSS Features

Receiving Bands ^①:

GPS L1 C/A: 1575.42 MHz

Galileo E1: 1575.42 MHz

GLONASS L1: 1602.5625 MHz

BeiDou B1: 1561.098 MHz

QZSS L1: 1575.42 MHz

Channels:

Tracking: 48

Fast Acquisition: 2

SBAS:

WAAS, EGNOS, MSAS, GAGAN

Horizontal Position Accuracy:

Autonomous: < 1.5 m CEP

Velocity Accuracy:

Without Aid: < 0.1 m/s

Acceleration Accuracy:

Without Aid: < 0.1 m/s²

Timing Accuracy:

1PPS: 6.8 ns @ 1σ

TTFF @ -130 dBm with AGNSS:

Cold Start: < 13 s

TTFF @ -130 dBm without AGNSS:

Cold Start: < 32 s

Warm Start: < 25 s

Hot Start: < 2 s

Sensitivity:

Acquisition: -147 dBm

Tracking: -162 dBm

Reacquisition: -154 dBm

Dynamic Performance:

Maximum Altitude: 18000 m

Maximum Velocity: 515 m/s

Maximum Acceleration: 4g

Interfaces

UART Interface:

Adjustable: 9600–921600 bps

Default: 9600 bps

Update Rate: 1 Hz (Default)

I/O Voltage:

Typical 3.3 V

Antenna Interface:

Antenna Type: Active or Passive

Antenna Power Supply: Internal or External

Power Management

Power Supply:

3.0–3.6 V

Typical 3.3 V

Power Consumption ^①:

Acquisition Power: 71 mA @ 3.3 V

Tracking Power: 67 mA @ 3.3 V

Power Saving: 9 μA @ Standby Mode

General Features

LCC Package: 24 pins

Temperature Range:

Operation Temperature: -40 °C to +85 °C

Storage Temperature: -40 °C to +90 °C

Dimensions: 16.0 mm × 12.2 mm × 2.3 mm

Weight: Approx. 0.9 g

Protocols: NMEA 0183

Approvals

Regulatory:

CE (Europe)

Others:

RoHS Compliant

^① Default configuration: GPS + GLONASS + Galileo